## CLAIMS

1. A process for producing a 2-acylthiophene compound comprising reacting a thiophene compound represented by formula (1):

$$R^1$$
 (1)

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wherein  $R^1$  is a hydrogen atom, a  $C_{1-6}$  alkyl group, a phenyl group, or a halogen atom, with at least one member selected from the group consisting of acid anhydrides represented by formula (2):

$$\begin{array}{cccc}
0 & 0 \\
\hline
 & 0 \\
\hline
 & R^2
\end{array} (2)$$

wherein  $R^2$  is a  $C_{1-6}$  alkyl group or a phenyl group, and acid halides represented by formula (3):

$$\begin{array}{ccc}
0 & & & \\
B^2 & & & & \\
\end{array}$$
(3)

wherein  $R^2$  is as defined above and X is a halogen atom, in the presence of a solid acid catalyst at a temperature less than 75°C in the absence of solvent, thus producing a 2-acylthiophene compound represented by formula (4):

$$R^1$$
  $S$   $R^2$  (4)

wherein  $R^1$  and  $R^2$  are as defined above.

- 2. The process according to claim 1 wherein the solid acid catalyst is at least one member selected from the group consisting of zeolites, activated clays, and cation exchange resins.
  - 3. The process according to claim 1 wherein the solid

acid catalyst is used in an amount of 0.1 to 50 parts by weight per 100 parts by weight of the thiophene compound.